

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for forming and quenching glass sheets, comprising:

a furnace having entry and exit ends and including a heating chamber having a conveyor for conveying glass sheets along a direction of conveyance through the furnace from the entry end to the exit end;

the exit end of the furnace including a roll bending station within the heating chamber, the roll bending station including a roll conveyor having horizontally extending conveyor rolls that are rotatively driven and spaced horizontally within the heating chamber along the direction of conveyance extending laterally with respect thereto to support and convey the heated glass sheets, the roll bending station having a pair of sets of bending rolls that are spaced laterally with respect to each other within the heating chamber along the direction of conveyance, and a drive mechanism that is located externally of the furnace and supports each set of the bending rolls with the rolls thereof projecting into the furnace heating chamber at progressively increasing inclinations along the direction of conveyance, and that provides the drive mechanism providing rotational driving of the bending rolls to provide bending of the conveyed glass sheets along a direction transverse to the direction of conveyance;

a press bending station located externally of the furnace downstream along the direction of conveyance from the exit end of the furnace to receive the bent glass sheets from the exit end of the furnace, the press bending station having a lower ring mold and an upper press mold that have curved shapes along and transverse to the direction of conveyance, and an actuator that provides relative vertical movement between the lower ring mold and the upper press mold to bend a glass sheet therebetween and cooperate with the roll bending station in forming the glass sheet with curvatures both along and transverse to the direction of conveyance; and

a quench station for rapidly cooling the formed glass sheet to provide toughening.

2. (Cancelled)

3. (Original) A system for forming and quenching glass sheets as in claim 1 wherein the press bending station actuator moves the lower ring mold vertically to provide the glass sheet forming.

4. (Original) A system for forming and quenching glass sheets as in claim 1 wherein the press bending station actuator moves the upper press mold vertically to provide the glass sheet forming.

5. (Original) A system for forming and quenching glass sheets as in claim 1 wherein the press bending station actuator moves both the lower ring mold and the upper press mold vertically to provide the glass sheet forming.

6. (Currently Amended) A system for forming and quenching glass sheets, comprising:

a furnace having entry and exit ends and including a heating chamber having a conveyor for conveying glass sheets along a direction of conveyance through the furnace from the entry end to the exit end;

the exit end of the furnace including a roll bending station within the heating chamber, the roll bending station including a roll conveyor having horizontally extending conveyor rolls that are rotatively driven and spaced horizontally within the heating chamber along the direction of conveyance extending laterally with respect thereto to support and convey the heated glass sheets, the roll bending station having a pair of sets of bending rolls that are spaced laterally with respect to each other within the heating chamber along the direction of conveyance, [[and]] a drive mechanism that is located externally of the furnace and that supports the bending rolls of each set to project inwardly into the furnace heating chamber

at progressively increasing inclinations along the direction of conveyance, ~~as well as~~ and the drive mechanism providing rotational driving of the bending rolls to provide bending of the conveyed glass sheets along a direction transverse to the direction of conveyance;

a press bending station located externally of the furnace downstream along the direction of conveyance from the exit end of the furnace to receive the bent glass sheets from the exit end of the furnace, the press bending station having a lower ring mold and an upper press mold that have curved shapes along and transverse to the direction of conveyance, and an actuator that moves both the lower ring mold and the upper press mold vertically to bend a glass sheet therebetween and cooperate with the roll bending station in forming the glass sheet curvatures both along and transverse to the direction of conveyance; and

a quench station for rapidly cooling the formed glass sheet to provide toughening.

7. (Currently Amended) A method for forming and quenching glass sheets comprising:

conveying a glass sheet within a heating chamber of a furnace from an entry end thereof toward an exit end thereof to provide heating thereof for forming;

continuing to convey the heated glass sheet on rotary horizontally extending rolls within the furnace heating chamber adjacent the exit end of the furnace and engaging opposite lateral sides of the roll conveyed glass sheet with a pair of sets of rotatively driven bending rolls that are spaced laterally from each other within the furnace heating chamber with each set having a plurality of bending rolls that are supported and rotatively driven externally of the furnace and that project into the furnace heating chamber spaced along the direction of conveyance with progressively increasing inclinations to provide bending of the conveyed glass sheets along a direction transverse to the direction of conveyance;

conveying the bent glass sheet out of the heating chamber of the furnace through the exit end thereof to between a lower ring mold and an upper press mold that have curved shapes along and transverse to the direction of conveyance;

providing relative vertical movement between the lower ring mold and the upper press mold to bend a glass sheet therebetween and cooperate with the initial roll bending to form the glass sheet curvatures both along and transverse to the direction of conveyance; and

thereafter rapidly cooling the formed glass sheet to provide toughening.

8. (Cancelled)

9. (Original) A method for forming and quenching glass sheets as in claim 7 wherein the lower ring mold is moved vertically to press bend the glass sheet.

10. (Original) A method for forming and quenching glass sheets as in claim 7 wherein the upper press mold is moved vertically to press bend the glass sheet.

11. (Original) A method for forming and quenching glass sheets as in claim 7 wherein both the lower ring mold and the upper press mold are moved vertically to press bend the glass sheet.

12. (Currently Amended) A method for forming and quenching glass sheets comprising:

conveying a glass sheet within a heating chamber of a furnace from an entry end thereof toward an exit end thereof to provide heating thereof for forming;

continuing to convey the heated glass sheet on rotary horizontally extending rolls within the furnace heating chamber adjacent the exit end of the furnace and engaging opposite lateral sides of the roll conveyed glass sheet with a pair of sets of bending rolls that are rotatively supported and rotatively driven from externally of the furnace and spaced laterally from each other with each set having a plurality of bending rolls projecting into the furnace heating chamber and spaced along the direction of conveyance with progressively increasing inclinations to provide bending of the conveyed glass sheets along a direction transverse to the direction of conveyance;

conveying the bent glass sheet out of the heating chamber of the furnace through the exit end thereof to between a lower ring mold and an upper press mold that have curved shapes along and transverse to the direction of conveyance;

moving both the lower ring mold and the upper press mold vertically to bend a glass sheet therebetween and cooperate with the initial roll bending to form the glass sheet curvatures both along and transverse to the direction of conveyance; and thereafter rapidly cooling the formed glass sheet to provide toughening.